



Fleetwood Urban District Council
and Port Sanitary Authority.

REPORTS


— ON THE —

SANITARY CONDITIONS
OF FLEETWOOD & PORT
During the Year 1920,

— BY —

D. M. GILL, M.B., C.M.,

Medical Officer of Health.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29207861>

Fleetwood Urban District Council.

THE SANITARY COMMITTEE AND PORT SANITARY AUTHORITY
CONSIST OF ALL MEMBERS OF THE COUNCIL.

Chairman: R. CROOKALL.

Vice-Chairman: R. FREELAND.

C. ATKINSON,	G. N. OSBOURN.
R. BAILEY.	H. D. PHILLIPSON.
T. CARDWELL.	G. M. ROBERTSON, J.P., C.C.
C. CONROY.	C. SAER.
W. ELLIOTT.	W. E. SIMPSON, J.P.
A. E. JACKSON.	(Chairman of the Council).
W. JOLLY.	J. E. SINGLETON.
R. E. MANN.	J. WALTERS.
T. MELLOR.	

Clerk and Solicitor to the Council:
A. COTTAM.

Medical Officer of Health:
D. M. GILL, M.B., C.M.

Deputy Medical Officer of Health:
J. COLGAN, M.D., B.Ch., B.A.O.

Sanitary Inspector and Cleansing Superintendent:
G. PILKINGTON, M.S.I.A., M.Inst.C.S.

Port Sanitary Inspector:
M. CURR, M.I.San.A.Scot., A.R.S.I.

Clerk: Miss L. ORMEROD.

Fleetwood Urban District Council.

MEDICAL OFFICER'S REPORT.

JUNE, 1921.

TO THE CHAIRMAN AND MEMBERS OF THE FLEETWOOD
URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have the pleasure to present my Seventh Annual Report on the Health and Sanitary conditions of the District during the year ending 31st December, 1920.

In so doing I beg to draw your attention to a few of the outstanding features in the Report.

The town maintains a steady rate of growth. This year the highest number of births ever recorded in the district has been registered. The birth-rate still remains at a very satisfactory level, and is in advance of the rate for the whole of England and Wales (other than the large towns).

One unsatisfactory feature in the Report is the continued high rate of infantile mortality. The rate recorded this year is the highest since 1912, and there is no doubt that the condition of the homes, overcrowding, and the environment generally plays its part in bringing this about.

One of the most pressing needs of the town is the abolition of the dust nuisance. The surfaces of the roadways in most of the streets are of the ordinary water-bound type (a macadam, water, and dirt mixture). These, after a very brief spell of

dry weather, give off large clouds of dust, which is impregnated with various disease forming bacteria, and this is no doubt one of the chief channels in which diseases of a respiratory character are disseminated. Watering these roads is of very little use, for, before the watering cart has in many cases reached the end of a street, dust is again being raised at the other end. Something more than sprinkling with water is needed if this danger to public health is to be avoided, and it would be a great advantage if the surfaces were treated with some kind of coal tar compound.

The area of the Fleetwood Sanitary District is 2,848 statute acres. The district is divided into three wards, the areas of which are:—

					Acres.
East Ward	...	...	...	...	61
Central Ward	...	...	...	...	62
West Ward	...	...	...	...	2725
					—
					2848
Sea Area (West Ward)	...	...	...	...	3244
					—
Total...	...	...	...	...	6092

The Boundaries of the Wards are:—

EAST WARD.—Commencing in the centre of Church Street, from Dock Street, thence along the centre of St. Peter's Place, Adelaide Street, Blakiston Street East, Victoria Street, Mount Road, and along the Esplanade, Queen's Terrace, and Dock Street to Church Street.

CENTRAL WARD.—Commencing in the centre of Church Street, and proceeding in the same direction as East Ward to the Esplanade, thence along the Esplanade, Mount Road, Walmsley Street, Lord Street, and Styan Street to Dock Street, to the junction with the East Ward at Church Street.

WEST WARD.—The remaining portion of the Urban District.

Population.

The population of Fleetwood, as estimated to the middle of 1920, is 19,038. The following table shows the increase in the population since the year 1831:—

Date of Census.	Population.
1831	842
1841	3765
1851	4051
1861	5029
1871	5122
1881	7345
1891	10031
1901	12093
1911	15682
1920	*19038

*Estimated.

At the request of the Ministry of Health the Registrar-General has supplied data of estimated populations to the middle of 1920 for calculation of the birth and death rates, together with other data, for the more correct compilation of the Report.

The birth-rate is based on a population of 19,038.

The death-rates are based on a population of 18,871.

Births.

During the year there were 504 births registered, namely, 265 boys and 239 girls, giving a birth-rate of 26.47 per 1,000 of the population, as against 18.67 for the previous year. This rate is the highest since the year 1914, when the births numbered 485, and the rate was 26.8.

The birth-rate per 1,000 of the population for the whole of England and Wales during 1920 was 25.4.

The actual number of births registered is the highest yet recorded, and is 151 more than that for the year 1919.

The births are distributed in the Wards as follows :—

	Boys.	Girls.	Total.
East Ward	66	63	129
Central Ward	71	55	126
West Ward	128	121	249
	<hr/>	<hr/>	<hr/>
	265	239	504

Illegitimate Births.

There were 20 illegitimate births, giving a percentage of 3.96 of the total births. In 1919, the number was 18, with a percentage of 5.09 of the total births.

Deaths.

Males—149. Females—98. Total—247.

The number of deaths registered in the district was 229, but deducting 13 deaths of persons not usually resident in this district and adding 31 deaths of residents which occurred in other districts, the corrected number is 247.

This gives a death-rate of 13.08 per 1,000 of the population compared with 11.46 in 1919.

The death-rate of the deaths actually occurring in the district, viz., 229, was 12.13 per 1,000.

Table of Deaths in the Several Wards.

	Males.	Females.	Total.
East Ward	46	28	74
Central Ward	53	37	90
West Ward	50	33	83
	<hr/>	<hr/>	<hr/>
	149	98	247

Uncertified Deaths and Inquests.

During the year there were 25 deaths (18 males and 7 females) registered, in which the cause of death was not certified by any medical practitioner. This number includes the deaths of seven persons who did not belong to the district. An inquest was held in 16 cases, and the verdicts found by the Coroner's juries were as follows:—

1. NATURAL CAUSES :

Lobar Pneumonia ...	...	...	...	1
Heart Disease ...	...	...	...	2
Other natural causes ...	...	...	...	2

2. BY ACCIDENT OR NEGLIGENCE :

Injuries ...	...	...	...	1
Sarcoma, result of injury ...	...	...	...	1
Drowning ...	...	...	...	3
Concussion of brain ...	...	...	...	2
Result of immersion in water ...	...	...	...	1

3. HOMICIDE ...

4. SUICIDES :

Accelerated by self-inflicted wounds while suffering from Cancer ...	...	...	...	1
By drowning ...	...	...	...	1

Deaths in Institutions.

During the year eleven persons belonging to the district died in the Cottage Hospital. These deaths have been distributed to the Wards in which the persons were usually resident.

The Mortality from all Causes at subjoined Ages :

Under 1 year	61
1 and under 2 years	10
2 „ „ 5 „	17
5 „ „ 15 „	8
15 „ „ 25 „	13
25 „ „ 45 „	32
45 „ „ 65 „	50
65 years and upwards	56
At all ages	247

Infantile Mortality.

The deaths occurring in infants under one year of age were 61 (20 in excess of 1919), giving a death-rate of 121.03 per 1,000 births.

The rate for England and Wales was 80 per 1,000 births.

The loss of infant life during the year has been high. Table IV. at the end of this Report shows the causes of death at various ages under one year. From this it will be seen that premature birth alone was responsible for 18 deaths, almost 30 per cent. of the total. In three cases in which twins were born all died of premature birth within a few weeks.

Three deaths of the illegitimate infants occurred during the year.

Deaths from Zymotic or Chief Epidemic Diseases.

Enteric Fever (see remarks below)	...	1
Measles	... ..	7
Scarlet Fever	... ..	3
Whooping Cough	... ..	5
Diphtheria (including Membranous Croup)		5
Diarrhoea and Enteritis (under two years)		4
<hr/>		
Total	... ..	25

These give a death-rate of 1.32 per 1,000, compared with 0.49 in 1919 and 0.99 in 1918; and a percentage of deaths from these diseases to the total deaths of 10.1.

No cases of Enteric Fever have occurred in the town, the death referred to above was a case admitted to the Cottage Hospital from a vessel in the Port Sanitary District, and, as the patient's home was outside the United Kingdom, the death cannot be treated as an outward transfer.

Tuberculosis.

The number of deaths from Pulmonary Tuberculosis was 18, and from other forms of Tuberculosis 5, a total of 23 (14 males and 9 females), giving a death-rate of 1.21 per 1,000, compared with 0.93 in 1919.

Those from Lung Tubercle give a death-rate of 0.95 per 1,000, compared with 0.71 in 1919.

Respiratory Organs.

The deaths numbered 45, giving a death-rate of 2.38, as compared with 1.93 for last year, and include those from Bronchitis (23) and Pneumonia (20).

Organic Heart Disease.

Twenty-two deaths, giving a death-rate of 1.16 per 1,000.

Malignant Disease (Cancer).

Eighteen deaths, giving a rate of 0.95 per 1,000.

Deaths from Violence.

Of the nine deaths due to violence, six were due to accidental causes, two to suicide, and one to homicide. In the latter case the body of a newly-born child was found on the foreshore, and the Coroner's jury returned a verdict of murder against some person or persons unknown.

Infectious Disease.

Under the Infectious Diseases (Notification) Act, 1889, and later Orders, 221 cases were notified. In Table II at the end of this Report a detailed list will be found of the several diseases.

Every house in which any infectious disease was reported was at once visited, and where possible the case was sent to the Isolation Hospital. The house, or that portion of it necessary, was disinfected as soon as possible after the removal or recovery of the case, and the other children, if any, were kept from attending school for a week or more, to ensure being free from infection. In all cases, enquiries were made as to the number of children attending school, the presence of visitors, the milk supply, and the general sanitary conditions of the premises; also printed and verbal instructions were given as to the isolation of the patient and to the disinfection of rooms, etc., with "Izal," which is supplied free of cost to all infected houses.

Notice of Infectious Disease was sent to the Council Schools, and to Private School Authorities, warning them not to receive any children from infected houses.

Bacteriological Examinations.

The arrangements made in February, 1919, with the Public Health Laboratory, Manchester, for the bacteriological examination of material from suspected cases of typhoid fever,

diphtheria, tuberculosis, etc., have been continued. Altogether 14 specimens have been examined during the year, and the results are as set out in the following statement:—

	Total.	Positive.	Negative.
Typhoid Fever ...	1	—	1
Diphtheria ...	3	1	2
Tuberculosis ...	10	4	6
	—	—	—
	14	5	9

The following list gives the number of cases of Infectious Diseases notified and removed to hospital:—

Infectious Diseases notified for 1920.

Nature of Disease.	Cases notified.	Cases removed to Hospital.
Diphtheria and Membranous Croup	39	19
Erysipelas	7	—
Scarlet Fever....	106	76
Puerperal Fever	2	—
Poliomyelitis	1	—
Opthalmia Neonatorum	5	—
Encephalitis Lethargica	1	—
Acute Primary or Acute Influenzal Pneumonia	17	—
Pulmonary Tuberculosis	29	—
Tuberculosis—other forms	14	—
TOTALS	221	95

It is very satisfactory to record that for the fifth year in succession no case of Enteric or Typhoid Fever has occurred in the town.

Diphtheria.

Thirty-nine cases were notified during the year and nineteen of these were removed to the Isolation Hospital at Moss Side. Of the five deaths due to Diphtheria, only two occurred in the hospital.

Under the Diphtheria Anti-toxin (Outside London) Order of 1910, serum is supplied free for the use of the inhabitants of the district. During the year 47 tubes of 2,000 units each were supplied to members of the medical profession.

Three swabs were taken for bacteriological examination, and two of these gave a negative result. The number of cases in which swabs were taken compared to the number of cases of Diphtheria notified is very small, and I again remark that it would be an advantage if bacteriological examination in the diagnosis of this disease was more freely made use of.

Scarlet Fever.

Scarlet Fever has been present to some extent during the whole year, but the prevalence with which it occurred during the latter part of 1919 did not continue. Altogether 106 cases were notified, as compared with 176 in 1919, and of these 76 were removed to the Moss Side Fever Hospital.

Three death occurred, two in the hospital and one amongst those treated at home. In each case the death was of a child under four years of age.

The following Table shows the number of cases of Diphtheria and Scarlet Fever notified and removed to hospital during each month of the year :—

Month.	DIPHTHERIA.		SCARLET FEVER.		TOTAL CASES.	
	Notified	Remov'd to Hospital.	Notified	Remov'd to Hospital.	Notified	Remov'd to Hospital.
January	6	3	20	11	26	14
February	7	4	17	13	24	17
March	3	1	6	6	9	7
April	5	2	10	4	15	6
May	3	—	7	6	10	6
June	—	—	8	8	8	8
July	1	1	3	3	4	4
August	1	1	1	1	2	2
September	1	—	2	1	3	1
October	—	—	5	4	5	4
November	2	1	6	4	8	5
December	10	6	21	15	31	21
TOTALS	39	19	106	76	145	95

**The Public Health (Pneumonia, Malaria, Dysentery, &c.)
Regulations, 1919.**

Under the above regulations 17 notifications of Acute Primary or Acute Influenzal Pneumonia were received, and three of these cases proved fatal.

There appears to be a general tendency amongst the medical practitioners to overlook the provisions of the above Regulations, as several cases of Pneumonia came to my knowledge, notification of which had not been received.

The Public Health (Acute Encephalitis Lethargica and Acute Polio-Encephalitis) Regulations, 1918.

One case of Encephalitis Lethargica occurred. Enquiries were made into the case, but no evidence as to how the patient contracted the disease was discovered. The patient, a man of 26 years, died the day following the date of notification.

Venereal Disease.

A campaign against these diseases is carried out by the County Council in co-operation with the Local Authority; and Male and Female Clinics have been opened at Preston and Blackpool for the free treatment of these cases on the latest scientific lines, of which all information can be obtained from me.

Child Welfare.

Child Welfare Work is under the administration of the County Authorities, assisted by a local Committee, the Hon. Secretary of which is Mrs. D. M. Gill, Osborne Bank, Fleetwood.

Two Infant Welfare Centres are held each week.

The Education (Administration Provisions) Act, 1907.

Under this Act the County Council is the Authority, and their Medical Officers make examinations of the children attending the Council Schools.

No Schools have been closed on account of Infectious Disease.

Water Supply

Is upland water, obtained from the Fylde Water Board, collected in reservoirs at Grizedale, about fifteen miles from Fleetwood, and is of very good quality.

Sewage.

This is carried out by gravitation to the Pumping Station, then raised into tank, and discharged untreated into the sea at low water.

The sewers are all regularly flushed.

Milk Supply.

The Dairies, Cowsheds, and Milkshops have been visited, and the regulations in respect to the limewashing of cowsheds have been complied with. There were twelve cow-keepers on the register at the end of the year, and 32 dairymen or purveyors of milk (other than cow-keepers).

Sale of Food and Drugs Act.

The sampling of food is carried out by the County Police Authorities, and I have again to recommend that it would be a great advantage if samples were also taken by the local Authority. Particulars of the work done will be found in the Inspector's Report.

Housing.

The housing accommodation is very inadequate. The Council's Housing Scheme for the erection of 600 houses is progressing slowly, there being no houses as yet ready for occupation. Forty-two houses are well on the way towards completion, but this number will not have any appreciable effect in alleviating the acute shortage and will scarcely be felt.

The schemes, mentioned in my last Report, for the erection of 300 houses by Local Industrial Undertakings, for some reason or other, I am sorry to say, have not been proceeded with.

Only nine houses, all built by private enterprise, were erected during 1920. This brings the total number of houses in the district to 3,409.

The number of houses inspected under the Housing Acts will be found in the Inspector's Report. It will be seen that this number is very small, it being impossible with the present staff to give this work the attention it demands.

The Report of the Sanitary Inspector (Mr. G. Pilkington) is appended, and I wish to thank him for his great assistance.

My thanks are also due to the Clerk, Miss L. Ormerod, for valuable assistance rendered.

I am, Gentlemen,

Your obedient Servant,

D. M. GILL,

Medical Officer of Health.

TABLE I.—Vital Statistics of Whole District during 1920 and Previous Years.

YEAR.	Estimated Popu- lation to middle of each year. (Figures supplied by Registrar General).		BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.			
	Births.	Deaths.	Uncor- rected Number	Nett		No.	Rate.	Of Non- residents registered in the District.	Of Resi- dents not registered in the District.	Under one year of age.		At all ages.	
				No.	Rate.					No.	Rate per 1000 Net Births.	No.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1914	18075	18075	483	485	26.8	215	11.9	7	12	47	96.9	220	12.2
1915	15207	15207	371	375	24.65	202	13.2	9	23	32	85.3	216	14.2
1916	16011	14716	381	381	23.79	204	13.8	5	14	35	91.8	213	14.4
1917	16408	14719	323	323	19.25	149	10.1	6	23	25	77.4	166	11.2
1918	16858	15046	323	323	19.16	262	17.4	15	18	31	95.9	265	17.6
1919	18905	18148	353	353	18.67	198	10.9	10	20	41	116.1	208	11.4
1920	19038	18871	504	504	26.47	229	12.13	13	31	61	121.0	247	13.0

Area of District in acres (land and water)	....	....	....	2848....
Total population at all ages	....	....	....	15875....
Total families or separate occupiers	....	....	....	3103....

At Census of 1911.

TABLE II.—Cases of Infectious Diseases notified during the Year 1920.

NOTIFIABLE DISEASE.	At all Ages.	Number of cases notified.							Total cases notified in each locality.			Total cases removed to Hospital.
		At Ages—Years.							East Ward	Central Ward	West Ward	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwds				
Small-pox ...	—	—	—	—	—	—	—	—	—	—	—	—
Cholera (C) Plague (P) ...	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Group) ...	39	15	18	4	1	1	1	—	14	8	17	19
Erysipelas ...	7	—	—	—	—	2	3	2	—	2	5	—
Scarlet Fever ...	106	10	82	11	2	2	—	—	30	23	53	76
Typhus Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever ...	2	—	—	1	1	—	—	—	1	—	1	—
Cerebro-spinal Meningitis ...	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis ...	1	1	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum ...	5	—	—	—	—	—	—	—	1	2	2	—
Acute Primary and Acute Influenzal Pneumonia ...	17	1	10	1	4	—	—	—	5	6	6	—
Encephalitis Lethargica ...	1	—	—	—	1	—	—	—	—	—	1	—
Pulmonary Tuberculosis ...	29	1	6	6	13	3	—	—	13	6	10	—
Other Forms of Tuberculosis	14	1	5	5	2	—	—	—	6	1	7	—
TOTALS ...	221	8	121	28	26	7	2	—	70	48	103	95

TABLE III.—Causes of and Ages at Death during the Year 1920.

Causes of Death.	Nett Deaths at Subjoined Ages of "Residents," whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	All ages.	Under 1 Year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	
All Causes :										
Certified	229	53	10	17	8	13	29	45	54	11
Uncertified	18	8	—	—	—	—	3	5	2	5
(Including Inquests).										
Enteric Fever	1	—	—	—	—	1	—	—	—	1
Small-pox	—	—	—	—	—	—	—	—	—	—
Measles	7	2	1	4	—	—	—	—	—	—
Scarlet Fever	3	—	1	2	—	—	—	—	—	—
Whooping Cough	5	2	1	1	1	—	—	—	—	—
Diphtheria and Croup	5	—	—	4	1	—	—	—	—	—
Influenza	8	1	—	—	—	—	2	3	2	—
Erysipelas	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	18	—	—	—	2	3	9	3	1	—
Tuberculous Meningitis	4	2	—	1	—	1	—	—	—	—
Other Tuberculous Diseases	1	—	—	—	—	—	1	—	—	—
Cancer, Malignant Disease	18	—	—	—	—	—	4	8	6	1
Rheumatic Fever	1	—	—	—	1	—	—	—	—	—
Meningitis	2	—	—	1	—	1	—	—	—	—
Organic Heart Disease	22	—	—	—	—	2	—	10	10	—
Bronchitis	23	9	2	1	—	—	1	2	8	—
Pneumonia (all forms)	20	4	3	1	1	—	1	8	2	3
Other respiratory Diseases	2	—	1	1	—	—	—	—	—	1
Diarrhœa, &c. (under 2 yrs.)	4	3	1	—	—	—	—	—	—	—
Appendicitis & Typhlitis	1	—	—	—	—	—	—	1	—	—
Cirrhosis of Liver	1	—	—	—	—	—	1	—	—	—
Nephritis and Bright's Disease	5	—	—	—	1	—	—	2	2	—
Puerperal Fever	2	—	—	—	—	1	1	—	—	—
Parturition, apart from Puerperal Fever....	2	—	—	—	—	1	1	—	—	—
Congenital Debility, &c.	25	25	—	—	—	—	—	—	—	—
Violence, apart from Suicide....	7	1	—	1	—	—	3	2	—	3
Suicide	2	—	—	—	—	—	—	2	—	1
Other defined diseases	57	12	—	—	1	3	7	9	25	6
Causes ill-defined or unknown	1	—	—	—	—	—	1	—	—	—
Totals	247	61	10	17	8	13	32	50	56	16
Special Causes (included above)										
Poliomyelitis	1	—	—	—	1	—	—	—	—	—
Encephalitis										
Lethargica	1	—	—	—	—	—	1	—	—	—

Report of the Inspector of Nuisances, For the Year 1920.

JUNE, 1921.

TO THE CHAIRMAN AND MEMBERS OF THE FLEETWOOD URBAN
DISTRICT COUNCIL.

GENTLEMEN,

I beg to submit my Report of the work carried out in the
Sanitary Department during the year 1920.

A summary of the visits made is as follows:—

Summary of Visits for 1920.

Description.	January	February	March	April	May	June	July	August	September	October	November	December	Total
Visits to Nuisances	3	28	16	18	12	21	22	12	18	10	10	12	182
Re-visits or visits to work in hand	—	6	18	38	12	11	20	12	5	28	27	—	177
Visits <i>re</i> Infectious Diseases	78	32	18	15	15	10	9	6	3	11	7	36	240
Visits to Common Lodging Houses	—	—	1	—	2	—	3	5	—	5	4	—	20
Visits to Factories and Workshops	—	5	7	4	1	2	8	4	5	3	2	4	45
Visits to Dairies, Cowsheds and Milkshops	—	5	2	3	20	4	3	3	—	—	1	5	46
Visits to Public Slaughterhouse	35	22	25	25	26	29	30	27	38	36	45	47	385
Visits to Food Shops	11	2	5	9	6	5	27	13	8	9	16	42	153
Visits to Bakehouses	—	1	4	3	3	3	3	1	8	—	10	15	51
Visits <i>re</i> Refuse Re- moval and Dis- posal	—	19	23	40	26	28	30	25	12	21	44	22	290
Visits <i>re</i> Housing Regulations	—	—	—	—	—	—	14	7	—	4	3	2	30
Visits to Caravans	—	—	—	3	3	—	7	12	—	1	—	—	26
Visits to Offensive Trades	—	—	—	—	—	4	1	2	—	—	—	—	7
Miscellaneous Visits	17	33	123	35	50	29	50	56	21	32	46	42	534
TOTAL	144	153	242	193	176	146	227	185	118	160	215	227	2,186

Removal of Nuisances.

The number of complaints received was 135. A large number of them related to matters which could not be dealt with under the Public Health Acts, or were of a trivial nature, but in every case where a complaint was found to be *bona fide* action was duly taken.

The number of preliminary notices issued was 147. Thirteen Statutory notices were served, but no appeal to the magistrates to enforce them was necessary.

The following table gives a classified list of the nuisances dealt with during the year:—

DWELLING-HOUSES :

Choked drains	62
Choked or defective W.C.'s	47
Insufficient refuse receptacle	65
Defective ventilating shaft of drains...	3
Accumulation of Manure or other refuse	14
Defective surface of yards	22
Rooms damp from defective walls or roof	80
Rooms in filthy condition	5
Houses infested with vermin	3
Defective eaves, gutters or downspouts...	25
Defective sink or sink waste pipe	10
Houses in filthy condition	6
Defective walls of house... ..	7
Defective windows	34
Filthy condition of yards	10
Defective pail closets	7
Cesspool overflowing	2
Defective floors... ..	10
House without sink	1
Defective staircases	3
Miscellaneous	28

FACTORIES AND WORKSHOPS :

Factory Abstract not exhibited	3
Limewashing of workshop required ...	3
Separate closet accommodation for sexes required	1
Bakehouse with drain choked	1
Bakehouse requiring limewashing	2

COMMON LODGING HOUSES :

Drain choked	1
Dirty floors	2
Defective wash-house floor	1

Housing and Town Planning Act, 1909.

No great amount of work was done under these Acts, owing to pressure of other work.

The following is a list of the work carried out :—

No. of dwelling-houses inspected	31
No. of dwelling-houses considered unfit for habitation	10
Closing Orders made	Nil.
No. of dwelling-houses where defects have been remedied	10

The defects found were as follows :—

Defective water-closet	10
Defective spouting	8
Dampness	11
Defective surface of yards	10
Insanitary ashpits	8
Dirty houses	3
Defective floors	6
Insufficient accommodation for refuse ...	5
Defective roofs	14
Defective ventilation	6
Miscellaneous	19

Infectious Diseases.

Visits to the number of 240 were made to cases of Infectious Diseases. During the year 534 school notices and certificates were issued.

Disinfection has been carried out as in previous years by spraying the infected rooms with formalin and fumigating with formalin gas, and treating infected bedding and clothing by steam at the Town Yard.

During the year 172 houses and 1,475 articles were disinfected.

The special arrangements as to co-operation with the Military Authorities have been carried out. Disinfection was carried out on 11 occasions and 756 articles of military clothing or bedding were disinfected.

The following table gives the number of rooms and articles disinfected in the various wards during each month of the year:—

Month.	EAST WARD.		CENTRAL WARD.		WEST WARD.		WHOLE DISTRICT.	
	Rooms	Articles	Rooms	Articles	Rooms	Articles	Rooms	Articles
January	6	91	16	92	15	93	37	276
February	7	50	14	72	9	63	30	185
March	5	52	5	24	5	44	15	120
April	5	44	8	32	2	5	15	81
May	3	18	9	8	7	58	19	84
June	5	52	4	30	12	55	21	137
July	5	28	—	—	3	20	8	48
August	5	38	—	—	3	33	8	71
September	3	—	2	—	6	37	11	37
October	3	52	—	—	5	40	8	92
November	2	22	3	27	6	34	11	83
December	15	72	5	51	13	138	33	261
TOTALS	64	519	66	336	86	620	216	1475

Food Inspection.

Special attention is given to this work. All the animals passing through the Public Abattoir are examined before and after slaughter. By this means a large amount of diseased and unsound meat is detained and destroyed. In many cases it would be nigh to impossible to detect the disease after the carcase had been cut up for sale.

One defect, and that a great one, in Food Inspection is the number of carcasses brought into the district from surrounding areas. In my opinion all animals intended for food should only be slaughtered at some central abattoir, where the work can be done under hygienic conditions and where a proper system of Meat Inspection is carried out.

During the year 385 visits were made to the Public Slaughter-house and 153 visits to other premises where foods are prepared or sold. Nearly five tons of meat and other foods were destroyed, or otherwise disposed of, as unfit for food.

The following table shows the number of animals slaughtered during each year since 1912.

Year.	Cattle.	Sheep.	Calves.	Pigs.	Total.
1912	640	3,951	74	407	5,072
1913	640	3,948	87	251	4,926
1914	626	4,002	95	281	5,004
1915	685	3,855	75	213	4,828
1916	773	3,443	10	126	4,352
1917	808	4,307	60	207	5,382
1918	691	4,413	101	402	5,607
1919	1,246	4,308	422	746	6,722
1920	1,103	4,414	209	1,038	6,764

The number and weight of the animals slaughtered at the Public Slaughter-house during the year under consideration was :—

Description.				No.	Weight in lbs.
CATTLE	{	Cows	....	311	163,879
		Heifers	....	482	227,306
		Bulls	....	20	10,209
		Bullocks	....	290	143,803
		TOTAL	....	1,103	545,197
CALVES	—	Calves....	....	209	10,301
SHEEP	{	Ewes	....	230	11,102
		Other Sheep	....	665	27,971
		Lambs	....	3,519	139,701
		TOTAL	....	4,414	178,774
PIGS	{	Sows	....	80	27,678
		Other Pigs	....	958	202,987
		TOTAL	....	1,038	230,665
		GROSS TOTAL	....	6,764	964,937

The percentage of animals slaughtered, other than sheep, that were affected with Tuberculosis was 3.14.

The following tables give a classified list of the quantities of meat and other food-stuffs destroyed during the year.

From the Slaughter-house.

Animals Affected.	Tuberculosis.	Weight in lbs.	Other Diseases.	Weight in lbs.
CATTLE	5 Carcases and all organs	2,738	Bruised Beef	37
	6 Part Carcases	794	16 Livers	174
	7 Heads	171	7 Lungs	60
	5 Hearts	19	1 Udder	4
	11 Sets of Tripe	272	1 Spleen	2
	45 Lungs	445		
	17 Livers	217		
	17 Diaphragms	65		
	2 Mesentery	13		
	2 Spleen	9		
	1 Udder	3		
	Offal	128		
	Fat	12		
	TOTAL WEIGHT	4,886	TOTAL WEIGHT	277
CALVES	Nil	—	1 Heart	5
			2 Lungs	3
			1 Liver	1
	TOTAL WEIGHT	—	TOTAL WEIGHT	9
PIGS	5 Carcases and all organs	940	1 Carcase and all Organs	72
	1 Part Carcase	90	10 Livers	35
	2 Heads	60	9 Lungs	22
	2 Viscera	34	3 Hearts	5
	15 Lungs	35	2 Viscera	3
	12 Livers	38		
	10 Hearts	16		
	TOTAL WEIGHT	1,213	TOTAL WEIGHT	137
SHEEP	Nil	—	28 Livers	55
			11 Lungs	11
			1 Heart	1
		—	TOTAL WEIGHT	67
GROSS TOTALS	For Tuberculosis	lbs. 6,099	For Other Diseases	lbs. 490

**From the Market, the Railway Station, Shops, and other
Premises.**

Description.	Weight in lbs.
31 Cases of Herrings	3,920
1 Tin of Salmon	1
1 Tin of Crabs	1
1 Jar of Paste Fish	1
6 Cases of Frozen Rabbits	288
15 Tins of Tomatoes	23
3 Tins of Pears	6
2 Tins of Peaches	4½
Dates	9
Bananas	2
3 Packets of Cornflour	2½
1 Egg Powder	¼
Butter	2
1 Jar of Jam	2
20 Tins of Condensed Milk	20
TOTAL WEIGHT	4,282¼

By the courtesy of the Superintendent of Police, the following particulars of the samples taken by the County Police under the Food and Drugs Act, in Fleetwood, during the year 1920, are given :—

No. of Samples Purchased.	Description of Samples.	Genuine.	Other-wise.	Remarks.
2	Arrowroot	2	—	—
1	Ground Ginger	1	—	—
1	Pearl Barley	1	—	—
1	Coffee	1	—	—
1	Lard	1	—	—
1	Tapioca	1	—	—
2	Rice	1	1	Vendor cautioned.
1	Baking Powder	1	—	—
1	Gregory Powder	1	—	—
1	Boracic Ointment	1	—	—
1	Tartaric Acid	1	—	—
1	Chlorate of Potash 1 oz.	1	—	—
1	Bi-carbonate of Soda	1	—	—
1	Epsom Salts,	1	—	—
1	Liquorice Powder	1	—	—
9	Milk	8	1	Vendor cautioned.
26	TOTALS	24	2	

All the above-named samples were declared genuine by the County Analyst with the exception of two; one rice sample, which contained 0.6 per cent. Talac, and one milk sample, which was found to contain cow dung.

Refuse Collection.

The collection of Refuse is carried out by your Authority over the whole district. The collection from dust-bins is carried out weekly ; from the ashpits once in three weeks. There are no privy middens in the area.

The following tables give the number and type of receptacles in the various Wards, and also particulars of the work carried out :—

Type of Receptacle.	East Ward.	Central Ward.	West Ward.	TOTALS.
Dust-bins	934	923	1,524	3,381
Ashpits	49	18	11	78
Pail Closets	—	—	36	36
TOTALS	983	941	1,571	3,495

Month.	Dust-bins emptied.	Ashpits emptied.	Pail Closets emptied.	Loads of Trade Refuse removed.	Total No. of Loads removed and approx. weight.	
					No.	Weight.
January	11,803	61	87	12	374	Tons. 392
February	13,827	50	86	12	343	360
March	15,122	82	62	12	373	391
April	13,688	63	60	13	336	352
May	14,228	99	66	9	351	368
June	14,250	139	106	14	307	322
July	14,921	40	80	16	316	331
August	14,495	140	96	13	323	339
September	14,476	95	82	18	320	336
October	14,533	97	78	12	318	333
November	14,707	70	78	10	339	355
December	15,090	86	72	5	379	397
TOTALS	171,140	1,022	953	146	4,079	4,276

The quantity of refuse to be removed from a very large number of houses is increasing very considerably. This is due to several families occupying one house, owing to the scarcity of houses, and also to the inferior quality of coal.

The work of refuse removal would be greatly facilitated if the tubs and boxes in use for the receipt of refuse could be replaced with galvanised iron dust-bins of a uniform size. The former, in addition to being awkward to handle, are a source of nuisance, as very few of them are provided with covers, and a large amount of refuse adheres to the sides which it is impossible to remove during the ordinary process of emptying.

The thriftiness of a great number of tenants needs to be improved, as a large amount of combustible refuse, which could very well be burnt, is placed in the refuse receptacles, and, in addition to reducing their coal bill, if this refuse was burnt, it would also reduce the cost of removal and disposal.

Factory and Workshop Act, 1901.

There are 80 Factories and 100 Workshops in the district.
These are classified as follows:—

FACTORIES.

Aerated Water Manufacture	2
Bacon Curing	1
Bakehouse	9
Beer Bottling	2
Belting Manufacture	1
Blacksmith	3
Boiler and Boiler Composition	2
Boot Repairing	6
Brass Casting	2
Button Making	1
Box Making	1
Concrete Block Making	1
Corn Grinding	1
Engineering	2
Electricity Works	1
Firelights and Firewood Works	2
Fish Curing Works	3
Fish Meal Works	1
Gas Works	1
Hosiery Works	1
Ice Manufacture	1
Joinery Works	4
Laundries	2
Loco. Repairs	1
Motor Car Repairers or Body Builders...	5
Oil Extraction Works	1
Printing	3
Saw Mills	3
Shipwrights, Ship Repairers, Sailmakers, etc.... ..	10
Miscellaneous	7
<hr/>	
Total	80

WORKSHOPS.

Millinery	...	...	...	...	...	...	7
Basket Makers	...	...	...	...	...	...	1
Plumbers, etc.	...	...	...	...	...	...	5
Sail and Net Makers	...	...	...	...	...	...	6
Tailors and Dressmakers	...	...	...	...	...	...	11
Boot and Shoe Repairers	...	...	...	...	...	...	5
Cabinet Makers and Upholsterers	...	...	...	...	...	...	3
Bakers and Confectioners	...	...	...	...	...	...	32
Fish Curers	...	...	...	...	...	...	11
Watchmakers	...	...	...	...	...	...	2
Prawn Shelling	...	...	...	...	...	...	2
Joiners and Builders	...	...	...	...	...	...	6
Miscellaneous	...	...	...	...	...	...	9
							—
Total	...	...	...	...	...	...	100

The following tabular statement gives some detail of the work done under the Factory and Workshops Acts.

1.—Inspection of Factories, Workshops, and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries).	10	—	—
WORKSHOPS (Including Workshop Laundries).	30	2	—
WORKPLACES (Other than Outworkers' premises included in part 3 of this Report).	5	—	—
TOTAL	45	2	—

2.—Defects Found.

Particulars.	Defects found.			Number of Prosecutions.
	Found.	Remedied	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :				
Want of Cleanliness....	3	3	—	—
Other Nuisances	2	2	—	—
Sanitary Accommodation—				
Not separate for Sexes	1	1	—	—
Offences under the Factory and Workshop Acts :				
Breach of special sanitary requirements for Bakehouses (ss. 97 to 100)	3	3	—	—
TOTAL	9	9	—	—

3.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	—
Action taken in matters referred by H.M. Inspector as remediable under The Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901)—	
Notified by H.M. Inspector	5
Reports (of action taken) sent to H.M. Inspector	5
Other	—
Underground Bakehouses (s. 101) in use at the end of the year.	1

Common Lodging-houses.

There are three registered common lodging-houses in the district, and these have been kept in a clean and orderly condition.

Licensing.

The undermentioned Licenses were issued during the year, viz. :—

Tram Cars	...	...	...	...	41	Licenses.
Drivers	...	...	...	...	61	„
Conductors	...	...	...	...	44	„
Luggage Porters	...	...	...	...	17	„
Hackney Carriages	...	...	...	...	3	„
Taxi Cabs	...	...	...	...	10	„
Drivers	...	...	...	...	21	„
Pleasure Boats	...	...	...	...	15	„
Boatmen	...	...	...	...	20	„
Ice Cream Vendors	...	...	...	...	10	„
Hawkers	...	...	...	...	28	„
Shoe Black	...	...	...	...	1	„

Total 271 Licenses.

All the above were kept under observation, and I am pleased to report that, with the exception of two cases, the bye-laws were complied with. Both these were complaints in respect of Hackney Carriages, and in each case the matter was immediately and suitably dealt with.

Foreshore.

The Foreshore has been regularly inspected for nuisances, and on the whole has been very free from any objection. Several porpoise carcasses were found, and these, along with any other obnoxious matter found, were either removed or buried. Several persons were warned against depositing rubbish on the beach.

I am, Gentlemen,

Your obedient servant,

G. PILKINGTON,

Inspector of Nuisances.

Summary of the Sanitary Inspector's Monthly Reports for Year ending 31st December, 1920.

MONTH 1920.	Rainfall.	Complaints.	Visits.	INFECTIOUS DISEASES.			REFUSE COLLECTION.			ANIMALS SLAUGHTERED AT PUBLIC ABATTOIRS.			
				Removed to Hospital.	Rooms Disinfected.	Articles Disinfected.	Dust-bins emptied.	Ash-pits emptied.	Pail Closets emptied.	Cattle.	Sheep.	Calves.	Pigs.
January	3.35	10	144	14	37	276	11803	61	87	114	109	15	57
February	2.20	8	153	17	30	185	13827	50	86	91	218	14	56
March	4.24	9	242	7	15	120	15122	82	62	108	77	51	38
April	4.40	14	193	6	15	81	13688	63	60	83	70	57	65
May	3.78	12	176	6	19	84	14228	99	66	74	49	12	67
June	3.01	14	146	8	21	137	14250	139	106	81	141	22	56
July	4.51	18	227	4	8	48	14921	40	80	78	745	12	33
August	2.00	6	185	2	8	71	14495	140	96	89	958	5	12
September	2.37	10	118	1	11	37	14476	95	82	99	767	7	48
October	2.18	14	160	4	8	92	14533	97	78	91	487	6	153
November	1.61	10	215	5	11	83	14707	70	78	113	455	4	98
December	2.69	10	227	21	33	261	15090	86	72	82	338	4	355
TOTALS	36.34	135	2186	114	216	1475	171140	1022	953	1103	4414	209	1038

Port Sanitary Report.

JUNE, 1921.

GENTLEMEN,

The health of those arriving at the Port during the past year has continued good, only two cases of infectious disease occurring. Particulars of these will be found in the Inspector's Report.

The mooring station for vessels found to be infected with Plague, Cholera, or Yellow Fever, has been fixed on the north side of Lune Deep, off the entrance to the River Wyre. An outside boarding station for infected or suspected ships has not yet been agreed upon. By arrangement with the Harbour Authorities, a steam tug would be placed at my disposal in the event of my having to board any vessel detained in Lune Deep.

The Port Hospital has not been in use since 1894; and the system of drainage, lighting, and water supply is not up to date. In view of the issue of the Port Sanitary Authorities (Infectious Disease) Regulations, 1920, I am of opinion that, if arrangements could be made, the most satisfactory way of dealing with sea-borne infectious diseases would be their admission to the Moss Side Isolation Hospital.

There are no immediate facilities on the docks for the cleansing of verminous persons, the steam disinfecting station being situate in the Town Yard.

Accompanying the issue of the Port Sanitary Authorities (Infectious Disease) Regulations was the Medical Inspection of Aliens Order, 1920. The latter, however, does not apply to Fleetwood as a port for the landing of Aliens.

The question of the use of water, drawn from the Dock, for cleansing purposes in the Port District was given special attention on account of its suspected pollution. Samples were collected and submitted for bacteriological and chemical examination at the Public Health Laboratory, Manchester. The result of these examinations confirmed the suspicions that this water was polluted and totally unsuitable for the purposes for which it was being used. Recommendations were therefore submitted for the discontinuance of this practice and for raising the standard of Hygiene generally. These were considered at a special meeting of the Port Sanitary Authority, and as a result of their adoption a considerable improvement has been effected.

During the year a survey of the Port District was carried out by a Medical Officer of the Ministry, Dr. E. L. Sturdee, O.B.E., and at a later period an inspection was made by Medical Officer G. C. Hancock, Esq., on the administration of the Foreign Meat and Unsound Food Regulations.

The personal relations between the officers of H.M. Customs, the Ministry of Agriculture, and the Port Sanitary Authority continue to be most cordial.

The following is the Report of Mr. M. Curr, the Port Sanitary Inspector, who had a very busy time in the Inspection of Food, as will be seen from the tables in the appended Report. I desire here to acknowledge my indebtedness for the assistance he has given me in the execution of my duties.

I am, Gentlemen,

Your obedient servant,

D. M. GILL,

Medical Officer of Health.

FORM A.—Amount of Shipping entering the Port Sanitary District during the Year.

	Number.	Tonnage.	Number Inspected.		Number reported to be defective.	Number of Orders issued.
			By the Medical Officer of Health.	By the Inspector of Nuisances.		
FOREIGN { Steamers Sailing Fishing	5	4,198	—	5	1	1
	5	1,182	—	5	2	2
	164	19,344	4	70	30	30
	174	24,724	4	80	33	33
COASTWISE { Steamers Sailing Fishing	1,353	508,644	1	24	15	15
	13	1,127	—	—	—	—
	2,727	275,136	14	58	35	35
	4,093	784,907	15	82	50	50
TOTAL FOREIGN AND COASTWISE	4,267	809,631	19	162	83	83

FORM B.—Rat Destruction.

Month.	No. of Vessels subjected to measures of Rat destruction.	Result — No. of Rats killed.	Measures employed.
March	5 Steam Fishing	71	Fumigation with Sulphur Dioxide.
April	14 „ „	Number not kept. Results good.	Poisoning (Rodine).
May	2 „ „	19	Fumigation with Sulphur Dioxide.
June	3 „ „	62	„ „ „
July	2 „ „	31	Poisoning (Barium) and Trapping.
August	3 „ „	103	Fumigation with Sulphur Dioxide.
Sept.	2 „ „	30	„ „ „
October	1 „ „	37	Poisoning (Arsenic).
Nov.	1 Vessel.	20 approx.	Killed during discharge of cargo.
TOTALS	33 Vessels.	373 Rats	

Particulars of the Inspection of Shipping.

TABLE A.—Showing the number of vessels inspected and the number found insanitary during each month of the year.

Month.	FOREIGN.		COASTWISE.		FISHING.		TOTAL.	
	Insp.	Insn.	Insp.	Insn.	Insp.	Insn.	Insp.	Insn.
January	1	1	—	—	7	—	8	1
February	—	—	—	—	9	2	9	2
March	—	—	—	—	13	11	13	11
April	—	—	3	2	5	3	8	5
May	2	—	2	1	17	11	21	12
June	—	—	4	2	15	6	19	8
July	1	—	1	—	12	6	14	6
August	1	—	3	2	9	5	13	7
September	2	1	3	1	12	6	17	8
October	2	1	3	3	8	4	13	8
November	1	—	3	2	8	6	12	8
December	—	—	2	2	13	5	15	7
TOTALS	10	3	24	15	128	65	162	83

TABLE B.—Showing the nationalities of the vessels inspected and found insanitary:—

	Inspected.		Insanitary.	
British	119	...	61
Iceland	30	...	17
French	4	...	2
Norwegian	4	...	—
Danish	1	...	1
Russian	1	...	1
Italian	1	...	1
Belgian	1	...	—
U.S.A.	1	...	—
Totals	162	...	83

TABLE C.—Showing the number of vessels inspected and found insanitary arriving from Foreign and Coastwise Ports, and also fishing vessels:—

FOREIGN.	Inspected.		Insanitary.	
Steam Vessels	2	...	1	
Sailing Vessels	8	...	2	
Steam Fishing Vessels	70	...	30	
	—		—	
Totals	80	...	33	
COASTWISE.				
Steam Vessels	24	...	15	
Sailing Vessels	0	...	0	
Steam Fishing Vessels	58	...	35	
	—		—	
Totals	82	...	50	
Gross Totals	162	...	83	
Re-visits	19			
	—			
TOTAL INSPECTIONS...	181			

TABLE D.—Showing the number of vessels inspected and number found insanitary at different points in the Port:—

	Inspected.		Insanitary.	
New Dock	118	...	57	
Wyre Dock	37	...	22	
Harbour	7	...	4	
	—		—	
Totals	162	...	83	

TABLE E.—Giving the number and nature of the sanitary defects or nuisances found on the vessels inspected.

Nature of Nuisance.	No. of Cases.	No. Remedied.
Forecastles requiring cleansing, painting, etc.	19	18
Forecastles damp from leaky decks, broken or defective deck or port lights, etc.	10	10
Forecastles defective in ventilation	13	13
Forecastles with dirty food lockers	7	7
Paint, etc., stored in crews' quarters	4	4
Crews' quarters in dirty condition	10	10
Crews' quarters verminous	4	3
Decks in dirty condition	3	3
Galley in dirty condition	4	4
Choked bilges	1	1
Defective and broken lights	5	4
Defective door of lamp locker	1	1
Choked and dirty w.c.'s	13	13
Defective w.c. seat	1	1
Fresh water tanks defective	1	1
Fresh water tanks requiring cleansing	2	2
Vessel infested with rats	21	21
Emission of dense black smoke	4	4
TOTALS	123	120

No statutory notices were issued. Informal notices 83 in number were given. Of the 123 nuisances found existing on vessels 120 have been remedied. Three vessels left the Port with the notices not wholly complied with and have not since returned to this Port.

Rats and Mice (Destruction) Act.

In connection with the administration of the above, the Port Sanitary Authority appointed me the officer to enforce the provisions of the Act in the Port Sanitary District, and particulars of the action taken in respect of shipping will be found in Form B at the beginning of this Report.

Vessels from Infected Ports.

No vessel from a port infected with Plague, Cholera or Yellow Fever arrived during the year.

Sickness on Vessels.

Two cases of Infectious Disease occurred during the year, one of Measles and one of Typhoid Fever.

The latter occurred on the passenger steamer S.S. "Viking," sailing between Fleetwood and Douglas, Isle of Man. On August 20th a medical practitioner was summoned to attend a case of sickness on this vessel. The patient, whose temperament registered 104°, was a steward, and had been living on board the vessel. He was removed immediately to the Cottage Hospital and five days later was notified as suffering from Typhoid Fever. The vessel was at once visited, and all due precautions taken to prevent the spread of the disease. The water tanks were emptied and cleansed and the quarters which had been occupied by the patient were disinfected and the clothing removed for steam disinfection.

The patient died in the Cottage Hospital on the 29th August.

Enquiries regarding the health of the crew were made from time to time on the vessel's arrival at the Port, and it was ascertained on the 15th September that a case of sickness, removed to the Borough Hospital, Douglas, Isle of Man, on the 1st September, had also developed Typhoid Fever. As the S.S. "Viking" was being taken off the service on the 18th, I crossed to Douglas on board the vessel and interviewed the Inspector of

the Local Government Board of the Island, with a view to tracing the origin of the outbreak. The patient (J. D.) in Douglas was also a steward, who had charge of deceased's belongings until the time of disinfection, and who had joined the vessel as recently as August 4th. Since the time J. D. joined the vessel he had not been in the best of health, and it would appear that he had been a probable carrier or source of infection.

The names and destinations of those of the crew leaving the "Viking" were obtained, and notice given to the Medical Officer of Health of each district. In acknowledging receipt of notice the Medical Officer of Health for Liverpool stated that a case of Typhoid Fever had occurred in his district, and that the patient had been employed in the steerage department of this vessel prior to the onset of his illness.

The following is a list of the cases of injury, sickness, or death reported or ascertained:—

Date.	Name of Vessel.	Where from	Nature of Sickness.	Remarks.
1920 Jan. 8	S.T. Pierre Francois Deswarte	Ostende	Severe cold	Medical attention was obtained for a case of sickness which proved to be a severe cold.
" 10	S.T. Princess Louise	Iceland	Injury	Master reported deckhand to have received injuries to his side whilst fishing.
" 15	S.T. Slebeck	Faroe	Bronchitis	A second deckhand was suffering from Bronchitis.
" 31	S.T. Ida Adams	Sea	Sickness (slight)	This vessel had called at Thorshaven for medical attention for two sick hands. On arrival at this port they were able to proceed home.
"			Measles	A deckhand, aged 17 years, who had complained of sickness three days before the vessel arrived here, was found to be suffering from measles. He was isolated on board the vessel and on recovery proceeded to his home in Manchester. The vessel was afterwards fumigated and cleansed.
Feb. 3	S.T. Ceresia	Moville	Injuries	The master reported having left the mate in Moville suffering from a broken collar bone and bruising, injuries received during a gale.

Date.	Name of Vessel.	Where from	Nature of Sickness.	Remarks.
1920 Feb. 4	S.T. Exmouth	Faroe	Ague and after-effects of malaria	Master reported having left one of crew in Faroe for medical attention. Another of crew, a deckhand, was found to be suffering from ague and after-effects of malaria.
March 18	S.T. Gwylfe	Reykjavik	Injuries	Mate suffering from injuries to shoulder Medical aid obtained.
" 27	S.T. Manor	Sea	Sickness	Master reported that engineer had complained of sickness, and a deckhand of abdominal pains. Both received medical attention on reaching home.
April 26	S.T. Indian Empire	Iceland	Bronchitis	Deckhand reported to have been medically attended in Iceland on account of bronchitis and stomach trouble.
May 3	Schooner Ekstrand	Moville	Injuries	Master reported seaman having had his collar bone fractured during voyage.
" 18	S.S. Lake Flovilla	Norfolk, Virginia	Poisoning Neuralgia	Fireman, aged 29 years, suffering from a poisoned hand. Engineer, aged 21 years, suffering from neuralgia. Both were removed from the vessel, which was lying in Lune Deep, for medical attention.

Date.	Name of Vessel.	Where from	Nature of Sickness.	Remarks.
1920 May 20	S.T. Edwina	Sea	Drowning	Reported having lost an apprentice, aged 15 years, whilst fishing.
" 27	S.T. Miletus	Iceland	Influenza	Master reported that himself and four of the crew had been treated in Iceland for influenza. All were well on arrival at this port.
July 9	S.T. Annie Melling	Sea	Injuries	Deckhand brought back to port on account of having sustained injuries to his arm.
Aug. 20	S.S. Viking	Douglas, I.O.M.	Typhoid Fever	A steward who was living on this vessel was removed to the Cottage Hospital, and five days later was notified as suffering from typhoid fever. The vessel was at once visited and precautions taken to prevent the spread of the disease. The quarters which the patient had occupied were fumigated and the clothing removed for steam disinfection.
" 24	S.T. Kumu	Sea	Sickness (slight)	The patient died in the Cottage Hospital on August 29th. Master reported a case of sickness to the Customs Officer. The patient was re-moved to the Cottage Hospital, and was discharged as well the following day.

Date.	Name of Vessel.	Where from	Nature of Sickness.	Remarks.
1920 Oct. 27	Schooner Waegwoltic	Lugunda, U.S.A.	Headache and chill	The Customs Officer reported a case of sickness on this vessel. On enquiry one of the crew was found to be suffering from headache and chill.
Dec. 10	S.T. Pretoria	Sea	Ague	Report that master had been brought to Port on account of sickness. On arrival, he was able to proceed home, and was later said to be suffering from ague.
" 13	S.T. Kumu	Sea	Injuries	Fireman had received injuries to face and chest owing to having been caught in the engine. After receiving attention on board the ship he was removed to the Cottage Hospital.
" 26	S.T. Evelyn	Sea	Sickness (slight)	Ascertained that four men had complained of abdominal pains, said to be due to the water supply. The water tanks were emptied and cleansed, and no further sickness was reported.
" 28	S.T. Gava	Sea	Injury	One of the crew had been left in hospital at another port, on account of injury.
" 29	S.T. Betty Johnson	Sea	Injury	Reported that mate had received injury to knee. He was medically attended on landing.

**The Public Health (Regulations as to Food) Act, 1907.
Unsound Food Regulations.**

Action was taken on 403 occasions under the above regulations, 387 of which were in respect of Fish—385 of the cases on account of being unsound, and the remaining two were cases where the fish had been contaminated by contact with the polluted water from the dock.

Of the 387 cases, 366 were in respect of fish landed from steam trawlers; 12, ex rail; one, ex a carrier steamer; four from the Belfast steamers, and four were fish dealt with in warehouses and fish-curing houses.

Of the remaining 16 cases dealt with under the regulations, 14 were in respect of animals arriving at the Irish Animals Landing Wharf. A roll of Bacon from the Belfast Warehouse and a quantity of meat brought in by rail were destroyed as unfit for food.

On no occasion was it necessary to obtain a Justice's Order, the owners or their representative surrendering the articles on notice of detention being given.

The total amount of fish forfeited and destroyed was exceptionally heavy, namely, 7,298cwts. 3qrs. 18lbs. This amount, however, includes 130 tons of salt fish which had been stored in a warehouse for some considerable time, and on examination was found to be in an advanced state of decomposition, especially in the middle of the stacks of fish. Also during April, when there was a glut of fish on the market, a large quantity remained unsold, and approximately 45 tons was dealt with on becoming unsound. Another cause which helped to increase the weight of condemned fish was the shortage of ice.

Unsound Food Regulations.

Table showing the Total Quantities of Different Varieties of Fish forfeited and destroyed in each month,
for the Year ending December 31st, 1920.

Month.	Bergylts	Bream	Cat Fish	Cod and Codling	Conger Eel	Dabs	Dog-fish	Dories	Fillets	Forkbeards	Gurnards	Haddocks	Hake	Halibut	Herrings	Kippers	Ling	Mackerel	Megrims	Mixed Fish	Plaice	Pollack	Roes	Saithe	Salt Fish	Skate and Roker	Soles	Turbot	Tusk	Whiting	Witches	Totals for each month	
January	—	—	—	—	—	—	—	—	—	—	—	1	—	—	10 $\frac{3}{4}$	—	—	8 $\frac{1}{4}$	—	2	—	—	$\frac{1}{4}$	—	—	—	—	—	—	—	—	—	cwts. qrs. lbs. 22 1 0
February	—	—	—	—	—	2	—	—	—	—	—	5 $\frac{1}{2}$	—	—	1 $\frac{1}{4}$	—	—	4 $\frac{1}{4}$	2 $\frac{3}{4}$	—	$\frac{1}{2}$	—	—	—	—	—	$\frac{3}{8}$	—	—	2 $\frac{5}{16}$	—	—	18 3 21
March	—	—	—	12 $\frac{7}{8}$	—	—	—	—	—	—	—	6 $\frac{1}{4}$	—	—	—	14	—	—	—	$\frac{1}{4}$	—	—	—	2 $\frac{1}{2}$	—	—	—	—	—	—	—	—	22 0 0
April	—	50	—	2 $\frac{1}{2}$	—	12 $\frac{1}{2}$	—	—	—	—	50	60	—	—	—	—	—	—	15	—	—	—	—	—	2600	—	—	—	—	917 $\frac{1}{2}$	—	—	3707 2 0
May	—	3 $\frac{3}{4}$	—	3 $\frac{5}{8}$	—	—	—	—	1 $\frac{7}{8}$	—	2 $\frac{1}{2}$	187	—	—	24	4 $\frac{3}{8}$	—	15 $\frac{1}{4}$	13 $\frac{3}{4}$	—	—	—	—	189 $\frac{1}{4}$	—	8 $\frac{5}{8}$	—	—	—	8 $\frac{7}{8}$	—	—	462 3 14
June	—	46 $\frac{1}{4}$	—	10	—	—	—	—	—	—	21 $\frac{7}{8}$	2 $\frac{1}{2}$	9 $\frac{1}{2}$	—	—	—	—	—	15 $\frac{5}{8}$	—	—	6 $\frac{1}{4}$	1 $\frac{1}{4}$	56 $\frac{7}{8}$	—	2 $\frac{1}{2}$	—	—	—	—	—	—	172 2 14
July	—	13 $\frac{1}{2}$	—	15	1 $\frac{1}{4}$	3 $\frac{3}{4}$	2 $\frac{1}{2}$	1 $\frac{1}{4}$	—	—	73 $\frac{3}{4}$	101 $\frac{3}{4}$	11 $\frac{1}{4}$	—	18 $\frac{1}{8}$	—	1 $\frac{1}{4}$	19 $\frac{3}{8}$	13 $\frac{1}{8}$	11 $\frac{1}{4}$	—	3 $\frac{3}{4}$	10	61 $\frac{7}{8}$	—	6	lbs. 14	—	—	2 $\frac{3}{4}$	—	—	371 2 14
August	—	21 $\frac{3}{8}$	—	35 $\frac{1}{4}$	—	—	—	—	—	1 $\frac{1}{4}$	54 $\frac{3}{4}$	79 $\frac{1}{4}$	46 $\frac{11}{16}$	lbs. 222	111 $\frac{7}{8}$	—	3 $\frac{1}{2}$	63 $\frac{3}{4}$	128 $\frac{3}{4}$	6 $\frac{1}{4}$	—	2 $\frac{1}{2}$	6 $\frac{7}{8}$	47 $\frac{1}{2}$	—	16	—	lbs. 6	—	66 $\frac{7}{8}$	—	—	694 1 25
September	—	19 $\frac{1}{4}$	—	10 $\frac{1}{8}$	—	4 $\frac{1}{2}$	—	—	—	—	42 $\frac{1}{2}$	227 $\frac{1}{2}$	36 $\frac{3}{8}$	1 $\frac{3}{8}$	60 $\frac{1}{2}$	—	6 $\frac{1}{4}$	51 $\frac{1}{2}$	28 $\frac{7}{8}$	7 $\frac{1}{2}$	$\frac{1}{2}$	6 $\frac{1}{4}$	2 $\frac{1}{2}$	58 $\frac{1}{4}$	—	7 $\frac{5}{8}$	—	—	2 $\frac{1}{2}$	41 $\frac{1}{4}$	—	—	615 0 14
October	16 $\frac{1}{4}$	23 $\frac{3}{4}$	—	28 $\frac{1}{8}$	—	2 $\frac{3}{4}$	—	—	—	—	16 $\frac{1}{4}$	197 $\frac{1}{2}$	15 $\frac{5}{8}$	—	36 $\frac{1}{4}$	—	2 $\frac{1}{2}$	116 $\frac{7}{8}$	19 $\frac{5}{8}$	10 $\frac{3}{8}$	—	4 $\frac{3}{8}$	—	27 $\frac{1}{4}$	—	1 $\frac{1}{4}$	—	—	80 $\frac{5}{8}$	1 $\frac{1}{4}$	—	—	600 2 14
November	43 $\frac{3}{4}$	7 $\frac{1}{2}$	3 $\frac{3}{4}$	55 $\frac{1}{8}$	—	6 $\frac{1}{4}$	—	—	—	—	15	121 $\frac{5}{16}$	14 $\frac{3}{8}$	1 $\frac{3}{4}$	6 $\frac{1}{4}$	—	$\frac{5}{17}$	32 $\frac{1}{2}$	15 $\frac{5}{8}$	7 $\frac{3}{4}$	—	2 $\frac{1}{2}$	—	42 $\frac{5}{8}$	—	12 $\frac{5}{16}$	—	—	—	18 $\frac{1}{4}$	1 $\frac{3}{8}$	—	408 2 14
December	—	—	—	5 $\frac{1}{4}$	—	—	4	—	—	—	82 $\frac{1}{2}$	47	6 $\frac{3}{8}$	—	8 $\frac{3}{4}$	—	—	—	8 $\frac{5}{8}$	7 $\frac{3}{4}$	—	—	—	12 $\frac{1}{2}$	—	—	—	7	18 $\frac{1}{2}$	—	—	—	202 1 0
Totals of each kind of fish destroyed during the year.	60 0 0	185 1 14	3 3 0	177 3 14	1 1 0	31 3 0	6 2 0	1 1 0	1 3 14	1 1 0	359 0 14	1036 2 7	140 0 21	5 0 12	277 3 0	4 2 0	14 0 14	311 3 0	261 3 0	53 0 14	1 0 0	25 2 14	20 3 14	498 2 14	2600 0 0	54 1 7	2 0	6	3 2 0	1156 3 21	2 2 14	7298 3 18	

The quantities are given in cwts. unless otherwise stated.

The following table gives the weights of fish landed and condemned in each year from 1911 to 1920 inclusive:—

Year.	Weight landed.	Weight condemned.		
	cwts.	cwts.	qrs.	lbs.
1911	820,930	1790	0	17
1912	806,134	1018	1	0
1913	754,406	1953	3	25
1914	799,388	2308	1	27
1915	317,614	470	0	6
1916	317,176	798	1	25
1917	283,917	190	2	8
1918	362,588	565	2	14
1919	776,354	1973	2	20
1920	963,173	7298	3	18

The number of landings of Fish during the year from steam fishing vessels amounted to 2,893, representing 769,476 boxes.

According to the figures given by the Superintendent of the Lancashire and Western Sea Fisheries Committee, the weight and values of the Fish landed at Fleetwood were as follow, viz.:—

	Values.	Weights.
	£	cwts.
Wet Fish	1,660,186	963,173
Shell Fish	1,506	1,131
	<hr/>	<hr/>
Total	1,661,692	964,304
	<hr/>	<hr/>
Totals for 1919 ...	£1,722,121	776,354 cwts.

Greater development of Fleetwood as a Fishing Port was mentioned in last year's Report. The large building previously used as a Grain Elevator has been leased by the Mac Fisheries. This building has undergone extensive alterations with a view of being used as a factory for the preparing of fish. Other buildings have been erected in connection with the above scheme, which, on completion, will be the means of employment for hundreds of people. Towards the end of the year alterations were greatly curtailed on account of industrial conditions and the lack of building materials, since when the work has been proceeding slowly.

Other buildings were in course of erection during the year for the purpose of Curing Houses.

Fishing, the principal industry of the port, has been very unsettled during the period under review. In the early part of the year a local dispute lasted a considerable time.

The trade carried on with the North of Ireland has continued very heavy, one cargo vessel running weekly, in addition to the daily service of passenger and cargo steamers. Included in the cargo are large consignments of Bacon, Eggs, Butter, Potatoes, and Spirits, while at the Irish Animals Landing Wharf the following animals were landed, in addition to the heavy weights of general cargo:—

Description.	Number.
Cattle	24,404
Sheep	27,470
Pigs	3,420
Goats	54
Horses	2,230
Asses	58
TOTAL	57,636

Of this number 16 Beasts, 12 Pigs, and 11 Sheep were slaughtered on account of emergency; 651 sheep and eight beasts were also slaughtered at the place of landing, owing to an outbreak of Foot and Mouth Disease in Ireland. All animals were examined after slaughter, and as a result parts of several carcasses were detained as unfit for food. Particulars of these will be found in the table at the end of this Report.

Inspection in Port District.

Curing Houses.

The premises where the curing of fish is carried on have been regularly inspected, both for the prevailing sanitary conditions as required by the Factory and Workshop Act and the purposes of food inspection. The total number of premises engaged in the curing and preparation of fish for food at the end of the year was 16.

One hundred and sixty-four visits were made to these premises during the year, and as a result the following nuisances or defects have been remedied:—

	Cases.
Dirty floor of curing house	2
Floor defective and insufficiently drained	5
Walls requiring limewashing	1
Choked drains	2
Offal barrels in offensive smelling condition	2
Offensive accumulations	11
Liquid from fish-house running across footpath ...	6
Dirty and defective sanitary conveniences	10
No provision of sanitary conveniences	1
No separate sanitary accommodation for females...	1
W.C. opening into direct communication with workshop	1
Miscellaneous	2
	—
Total	44
	—

Premises on Docks and Harbours.

Visits to the number of 688 were made to other premises within the district during the year.

The following nuisances or defects were remedied at different premises :—

	Cases.
Defective drainage	1
Choked waste pipe	1
Choked drains or gullies	36
Choked and defective W.C.'s	10
Dirty W.C.'s	18
Offensive accumulations	34
Emission of dense black smoke	1
Miscellaneous	5
	—
	106
	—

During the first six months of the year great difficulty was experienced in the disposal of the fish offal created both on the fish stages and in the curing houses. Large quantities were sent by rail to other towns where manufactories for such material are established. The burying of large quantities with interlayers of lime was carried out on the dock estate by the Railway Company. For a time this limited the nuisance until the warmer period came, when the offal pit had to be discontinued. By this time the local Fish Meal Works commenced operations in the manufacture of meals and guano.

The manufacture of by-products from fish is one which creates nuisances of a most objectionable nature when the effluvia is allowed to escape. Many complaints were received at times when the emanation of smells were noticed. On some occasions the plant was under repair or alteration when the visits were made relative to effluvia. At other times it was found that the cause was the insufficient use of water.

I am of opinion that the noxious fumes can be dealt with from such works by collection into chambers and an abundance of water for condensing purposes.

Fish Stages.

Recommendations for improving the general sanitary conditions on the fish market were submitted in the month of June, since when part of the recommendations have been adopted with considerable improvement. The whole recommendations have not yet been adopted.

Sanitary Conveniences.

The provision of closet accommodation is most inadequate around the dock, and although this is a matter which has been promised attention for several years very little has been done to remedy the unsatisfactory conditions. The latrines erected by the Admiralty during the war were taken over by the Railway Company in the beginning of the year. These are pail closets and are not of a satisfactory type, but on account of the proposed extension of the dock they have been allowed to remain as a temporary convenience for two or three years.

The question of erecting further temporary accommodation has been considered. The sites have been chosen and agreed upon by the Dock Superintendent. It would appear that the time has come for the provision of a definite system of drainage and sewerage of the Dock Estate. Several places used as workshops on the dock premises are without the accommodation required.

The provision of pail closets as a permanency is not satisfactory, on account of the difficulty of disposal of the excrement and also the close proximity of the Food Market.

One old convenience of the open type remains. The attention of the Railway Company was drawn to the insanitary condition of the same, and the request submitted for its closure.

I am, Sir,

Your obedient servant,

MITCHELL CURR,

Port Sanitary and Food Inspector.

Table showing the Quantities of other Foodstuffs destroyed during the Year ending December 31st, 1920.

Date.	Description.	Weight in lbs.	Why Condemned.	Where from.	Seized or Forfeited.	How disposed of.
1920 Jan. 3	Ribs of Beef	9	Bruised	Belfast	Surrendered by Railway Co.	Destroyed at Slaughter- house.
" 6	Pork	5	Fractured, with infiltration of blood.	"	"	"
Mar. 10	Pork	6	" "	"	"	"
" 16	Bruised Beef	112	Bruised	"	"	"
" 30	Bruised Beef 1 Cow Liver	140 12	Bruised Fluked	"	"	"
" 31	Pork	15	Fractured with infiltration of blood.	"	"	Burnt in ship's furnace.
April 23	1 Cow Lungs 1 Cow Liver	10 6	Tuberculosis Fluked	"	"	"
May 6	Bruised Beef	21	Bruised	"	"	"
" 17	Frozen Beef	66	Decomposing	ex Rail	Surrendered by Owner	Destroyed at Electricity Works

Date.	Description.	Weight in lbs.	Why Condemned.	Where from.	Seized or Forfeited.	How disposed of.
1920 May 20	Bruised Beef Offal	100 57	Bruised Peritonitis	Belfast	Surrendered by Railway Co.	Destroyed at Electricity Works.
" 20	1 Liver	14	Fluked	"	"	Burnt in ship's furnace.
June 8	Bruised Beef	24	Bruised	"	"	" "
July 30	1 Beast Liver	15	Fluked	"	"	" "
Aug. 27	1 Sheep Liver	2	"	"	"	" "
Sept. 24	1 Roll of Bacon	37	Decomposing	ex Rail	"	Destroyed at Slaughter- house
Dec. 6	Carcase of 1 Pig and all organs	224	Asphyxia	Belfast	"	Destroyed at Electricity Works

